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THE GIFT OF
PAUL POMEROY IVES 2D
IN MEMORY OF
PAUL POMEROY IVES

BACON'S PICTORIAL CHART OF POULTRY.



DARK BRAHMA COCK.

THE DARK BRAHMA COCK *should be black and white only, the tips of yellow, the hackle and saddle hackles being silvery white, with black centre. The tail the breast, thighs and leg feathers are also a deep black. The white with an even black bar, formed by the coverts running across it.*



DARK BRAHMA HEN.

THE DARK BRAHMA HEN *is a deep steel grey in ground-colour, the feathers being beautifully pencilled, clear and sharp. When pencilled throughout they are very valuable, being very rare. They become more brown in colour at each moulting.*



BUFF COCHIN HEN.

COCHINS (Buff, White, Black and Partridge).—*Very large—very hardy—easily reared—excellent winter layers—sit more frequently than any other breeds—good table birds, especially when young—bear confinement better than any other variety—great eaters—very tame.*



PILE GAME BANTAM COCK.

BANTAMS (Game, Golden, and Silver-laced, Sebrights, White, Black, etc.)—*The smallest variety—oftener kept for fancy than for profit. They are good layers and sitters.* Sebrights *are the greatest favorites. Pile Bantams are white breasted. The Black are prized for smallness; white, for purity of color.*



WHITE COCHINS.

WHITE COCHINS *are the most beautiful of the Cochin variety. There is some difficulty in breeding them of pure white. The hens are quite equal to the other varieties in all the points of excellence.*

HOW TO MANAGE POULTRY.

THE FOLLOWING INSTRUCTIONS on the management of Poultry are the result of many years of practical experience in rearing poultry of almost every breed and with the highest degree of success; and we venture to assert that no one who manages the poultry yard as here directed will ever come to the conclusion that fowls don't pay. More detailed information, upon all points may be found in "Bacon's Guide to Poultry Keeping," price, 1s., or with illustrations 1s. 6d.

Early Hatching.—not later than March or April—is an indispensable element of success. The advantages are—First, early chickens bring the highest price in the market. Second, the pullets will begin to produce a return when six months old instead of nine months. Third, early hatched pullets are [illegible] layers. FOURTH, they are ready to sit early the following spring, when sitters are most wanted. FIFTH, they attain an age by the next spring, which makes their eggs suitable for hatching. SIXTH, the early chickens mature in time for the summer and autumn shows; none but the hardiest breeds should however be hatched before March, unless warm housing is provided.

Selection of Stock. None but young fowls should be purchased. The cock should not be closely related to the hens, if chickens are to be reared, or degeneracy will be the result. COCHINS are the most reliable for early sitting, and bear close confinement better than any other variety. Brahmas are exceedingly hardy, are famous winter layers, and seldom hatch but once a year. Dorkings, for summer laying and for table or market fowls, are unsurpassed, and are excellent mothers but are less hardy, and require a dry soil. Nonsitting breeds, such as Houdans, Spanish and Hamburgs are most desirable when chickens are not to be reared, Houdans having the preference on account of their great hardihood, and being excellent winter layers.

Winter Laying depends largely upon the WARMTH secured by heavy plumage and plump build, as well as by warm housing and generous feeding; and it is to these qualities in Cochins and Brahmas that their superior qualities as winter layers may be largely attributed.

Renewal of Stock. With a few exceptions, hens become unprofitable as layers at the age of two and a half years, and should be killed in the autumn. One third of the stock (the old birds) should be killed each year at this season and early hatched pullets should take their places.

POULTRY HOUSES.

Construction of Poultry Houses. Warm, light, clean and dry houses are indispensable to success. Fowls will thrive better in small detached houses than where a large number are collected together. The house should have a southern aspect to admit as much sunshine as possible, without which fowls never thrive well, nor can healthy chickens be reared. The houses too, should be warmly built to secure comfort and winter laying. A tight roof is indispensable. In the winter a glass front is of great service in admitting the sun and light, while protecting against the cold winds. Fowls will suffer exposure to extreme cold and bad weather rather than resort to a dark house in the daylight.

The Floor. A gravel floor if firmly packed is the best, but it should be raised above the level of the ground to secure dryness. Brick or wooden floors are very objectionable. Whatever the flooring it should be kept strewn two inches in depth with dry mould, the deodorizing properties of which are of the greatest value. No poultry fancier can afford to disregard this essential sanitary element. Without a tight roof too, the mould becomes wet and loses its property of absorbing odours. The mould should be raked over daily.

Ventilation—is a very important part of the construction of poultry houses, but care should be taken that it is not obtained at the expense of draughts or exposure to bad weather and cold winds. Fowls will always carefully avoid a draught when they have an opportunity—instinct being of more avail to them in this respect than reason is to some people,—but if their perches are placed between two openings in the house they are compelled to resort to them and colds and disease are sure to be the result, especially in the winter months.

Perches are generally too small and too high. The latter fault is often the cause of serious and incurable injury to the feet of fowls in descending, especially in the heavier breeds. Four or six inches in diameter is preferable, and with the bark left on. They need not be placed more than six inches from the ground and must be out of any draught.

Grass Runs in front of the houses are of great value—ten feet square at least to each fowl, or the grass will cease to grow. As a protection against the hot sun in summer, small trees are valuable in the yard.

A Dust Bath, composed of sand and ashes, must at all times be accessible for fowls to wallow in, this being very necessary for health and a preventive against vermin. A table spoonful of flower of sulphur should be placed in the dust bath occasionally to destroy vermin. The house should be lime washed twice a year. Sulphate of iron mixed with lime wash—one lb. to every three gallons—is a preventive of vermin.

FOOD AND DRINK.

Food. The following whole grains are most suitable—barley, wheat oats, buckwheat and maize. The two latter, though most valuable foods, are too stimulating and fattening to be used more than two days in a week.

The soft foods are quite as economical. In the order of their usefulness they are: barley meal, maize meal, middlings, mangold wurzels and potatoes. Potato parings or small potatoes boiled and mixed with middlings, form a very economical and good breakfast. Bread soaked too full of water should not be given.

Green Food must be frequently given, especially where fowls are in a confined space, and no amount of other food can be substituted for it. Cabbage leaves, turnip-tops, lettuce, or grass cut from the lawn are equally valuable. Fowls cannot thrive or remain in good health without a daily supply of green food.

Animal Food must be given when fowls are kept in confinement, especially in winter. A pound of boiled bullock's liver per week for half-a-dozen fowls is sufficient, and the increase of the number of eggs laid will well repay the cost.

Water—fresh and clean, should be at all times accessible sheltered from both sun and rain, renewed twice daily, and the vessel kept well washed—dirty water and rain water causing disease. Fowls must never be compelled to eat snow in consequence of the water being frozen, as it is highly injurious.

Lime—is essential for the formation of egg-shells, and must be within reach at all times. Bricklayers rubbish, or egg-shells, broken up finely, are suitable.

Frequent Change of Food is necessary. Fowls do not thrive well upon one kind of food, however well selected.

Manner of Feeding. Over feeding is a more common fault than under feeding. Hens when fat are more subject to disease and will produce fewer eggs. They should be fed only twice a day when they have their liberty, or are constantly supplied with a variety of green food. Soft food should be mixed dry and crumbly. Feeding on muddy ground is very injurious. Regularity in feeding is important.

Moulting. At this time, there is a serious strain upon the system, and stimulating food is useful, such as meat or hemp seed, and precautions should be taken against bad weather and cold winds, especially with old fowls, which moult later.

The Cost of Feeding should not exceed 2d. or 3d. each fowl per week. When laying they require more liberal feeding, also during a continuance of bad weather.

LAYING AND SITTING.

To Promote Laying. The system of management here recommended embraces nearly all that is practicable on this point. Too much stimulating food to force laying is highly injurious, exhausting the productive powers, and rendering the fowls subject to disease. Red pepper, glaubers salts, and chandlers' graves are often used, but while they increase the laying, the fowls are proportionately injured.

Sitting. Hens will sit sooner if eggs are allowed to accumulate in the nest. The inclination may also be hastened by the laying hen being confined in a darkened nest with some imitation eggs, kept warm, and fed with stimulating food such as buckwheat, hemp-seed, maize, and a little raw chopped liver. Sitting, even for six weeks at a time, is no tax upon the hen, as is often supposed, but she will actually fatten during the time if well fed once a day.

Hens which have laid fertile eggs sit more persistently than those which have not, when therefore a hen is found to be a persistent sitter the eggs which she has previously laid will be most likely to hatch.

Breaking off the Sitting. This is best effected by shutting the hen away from her nest for two or three days, and feeding her sparingly on a low non-heating diet, such as potatoes or boiled rice, and green food. The inclination to sit arises from a normal feverishness which is reduced by low diet.

Preserving Eggs. Oiling eggs closes the pores, and causes them to keep fresh for sitting or eating some weeks longer than if left in the usual manner. They should be put in a cool place with the large end down or turned over daily. The oiling does not interfere with their hatching as is often supposed, as we have proved by repeated experiments.

Preparations for Sitting. Constant moisture is essential in the sitting nest, which is best secured by building the nest upon the ground (Nature's plan). When boxes are used a thick turf or several inches of mould must be placed in the bottom, covered with a little well beaten straw cut short, the box to stand on the ground. If the house is dry and sunny and the weather dry, two or three table spoonfuls of warm water should be sprinkled on the eggs twice a week, just before the hen returns to the nest. Hay for nests should be avoided, as it encourages vermin. Sitting nests should be enclosed from intrusion of other hens. In winter they should be placed in a warm house.

MARCH and APRIL, are the best months for hatching, except for Exhibition birds, which may, with warm housing, special care and night feeding, be hatched and reared in January and February.

Selection of Eggs for Sitting. Eggs from adult fowls—those in their second or third year—produce much finer chickens than eggs from either young pullets or very old birds. Select large evenly shaped eggs from healthy fowls. Prolific layers



HER MAJESTY'S POULTRY HOUSE, WINDSOR.



HOUDAN HEN. DORKING HEN.

HOUDANS *are black and white, marking being uneven or broken. Black should predominate—top-knots and beards of irregular feathers of white and black— excellent layers of good sized eggs—non-sitters.*



REFERENCE.

1. Comb.	6. Breast.	11. Tail Coverts.	16. Primary Wing Feathers.
2. Face.	7. Back.	12. True Tail Feathers.	17. Point of Breastbone.
3. Wattles.	8. Saddle.	13. Wing Bow.	18. Thighs. 19. Hocks.
4. Ear-lobes.	9. Saddle Hackles	14. Wing Coverts.	20. Legs or Shanks.
5. Hackle.	10. Sickles.	15. Secondary Wing Feathers.	21. Spur. 22. Toes.

THE following is a brief description of the principal varieties of fowls not included in the accompanying illustrations.

Polands, Golden and **Silver Spangled Black**, &c. Excellent spring and summer layers, but not winter. Very delicate, requiring care and warm dry housing—Non-sitters. SULTANS are a sub-variety of Polands.

Crevecœurs.—The oldest French variety in England. Large fowls—Hens nearly as heavy as the cocks. Prolific layers—non sitters—thrive in limited space, but require dry soil and plenty of sun.

La Fleche—A French variety. Large, tall fowls not winter layers. Good table birds, require special care in winter.

Plymouth Rocks.—American variety. Cuckoo marked throughout Large hardy fowls. Excellent winter and summer layers, good table birds good sitters and mothers.

Dominiques.—The oldest American variety—Cuckoo marked. Capital layers, very hardy. Excellent table birds.

Malays—Excellent table birds, very hardy. Bear confinement. Good sitters.



DORKINGS COCK.

DORKINGS (Silver Grey, Colored and White).—*Finest English—large size—unsurpassed for table, summer laying, also as sitters and mothers—not very hardy—require dry soil, plenty of sun and wide range—colored variety not bred for feather—silver grey must have black breast and silver white tackle.*



BROWN LEGHORNS.

LEGHORNS (Brown and White).—*The most popular American variety—very hardy—prolific layers—non-sitters—thrive well in limited space. The Brown Leghorns have a beautiful plumage, and the white have flowing tails, red face, and large white ears.*

HOW TO MANAGE POULTRY.

transmit that quality. The more newly laid the eggs the quicker they will hatch and the stronger will be the chicks. Each week in age of eggs adds about six hours to the time required for hatching, and the older eggs should therefore be given to the hen some hours sooner, so that all may hatch at one time. Nine eggs in cold weather and thirteen in warm are sufficient. Small broods thrive better than large ones, especially in winter, as the hen cannot keep the large broods so warm at night.

The Sex of Eggs. The earlier in the season the more cockerels are apt to predominate in the brood. The earlier eggs from any batch will also hatch more cockerels, and the last ones laid before sitting will hatch more pullets. The last eggs of a batch are generally SHORTER than the first.

The Sitting Hen should, and generally will, leave the nest once a day for food and drink: being in a half dormant state she only requires food and drink once a day. Barley-meal, barley, and oats are suitable foods, maize and buckwheat being too heating; access to the dust bath daily is indispensible, without which she may become troubled with vermin and desert the nest. Fresh water and green food also gravel or egg-shells broken finely to aid digestion should be accessible. The safest plan is to lift the hen from the nest every morning at a regular hour, feed her well, and see her return within twenty, or at most thirty minutes, and then shut her in. She should never be put upon the nest. In very cold weather it is best to place a piece of blanket over the eggs while the hen is from the nest. If she is inclined to remain off too long she should be carefully driven to the nest but not frightened. The nest should be inspected daily when the hen is absent, and if an egg has been broken the contents must be removed and the soiled ones washed in warm water or the nest will become offensive and the eggs probably become addled.

Testing the Fertility of the Eggs. At the end of the first week the fertility of the eggs can readily be told by holding them to a strong light, using a large card with an egg-shaped hole cut in it, a little smaller than the egg. The fertile ones will be almost black and opaque, while the unfertile ones will be as clear as a new laid egg. In a darkened room with a bull's eye lantern to throw the light, they can be tested in a few days after sitting. The unfertile ones should be removed, leaving more room for the others, and thus decreasing the risk of their becoming chilled and addled. If two hens have sat at the same time and a large proportion of the eggs prove to be bad, the good ones can all be given to one hen and the other supplied with a fresh batch. The rejected eggs, boiled hard, will be suitable for the first food of the newly hatched chicks.

HATCHING AND REARING CHICKENS.

Hatching. The hatching process is most interesting and extraordinary. On the twentieth or twenty-first day, the chick, by repeated taps with the very hard sharp scale with which nature has armed his now soft beak, fractures the shell. (This scale drops off the day after hatching). His position in the shell—his head turned back, under the wing the beak touching one side and the claws the opposite side—is such that as soon as he has made a fracture in the shell his further efforts cause him, by degrees, to rotate completely round, every part of the shell being in turn presented to the beak, and thus the shell is completely severed in halves and he escapes. By the heat of the hen the chick is dry in a couple of hours, when the down expands, and the little creature assumes that beautiful furry appearance so fascinating to young amateurs. The hen renders no assistance during the hatching as is often supposed. She should have food and water given her on the nest the day of hatching.

Rearing Chickens, in order to be in any degree profitable or satisfactory, requires the observance of numerous essential, yet simple rules. A table spoonful of flowers of sulphur should be sprinkled in the nest the day before hatching, or small vermin are almost sure to swarm into the down of the chick, and are difficult to remove. When the last chick is hatched and dry, the hen and brood should be removed to a WARM, SUNNY house or coop, with two inches of dry mould strewn upon the bottom, which will absorb all odour and keep the place sweet: though moisture is necessary to successful HATCHING, all dampness must after hatching be carefully avoided, and a dry soil, sunshine and warmth are now equally indispensable—cold damp ground, cold winds and rain and exclusion from the sun being fatal to young chickens. The coop should be open to the south, and if the weather be cold and windy, a glass front is invaluable, admitting the sun and excluding the cold winds.

Food and Drink. The chicks require no food for the first day after hatching, nor any sort of dosing, which is sometimes practiced. The yolk of the egg is absorbed into the abdomen a day or so before hatching, and supplies the necessary sustenance. The one essential thing at first is WARMTH, which they derive from the mother, or by basking in the sun if the weather be warm. The first feeding should consist of hard boiled eggs mixed with dry bread crumbs. Custards and rice puddings are frequently given to valuable chicks, and are very useful, especially for the first week. Fine oatmeal, mixed dry and crumbly, is the best staple food. Barley meal also mixed dry, groats boiled two minutes and the water poured off are excellent after the first week or two. Barley wheat or maize broken coarsely in a mill, rice boiled in skim-milk, buckwheat and canary seed, also wheat boiled for five minutes are suitable, and will afford a frequent change which is very essential. Bread soaked full of water is very bad, causing diarrhœa. Milk or skim-milk—care being taken that it be not sour—is good after the first week. All sour food must be carefully avoided. They must be fed every two hours for the first week or two, and every three hours for the first two months. Growing chickens cannot, like old fowls, be over fed, yet they should only be given as much as they will eat, and time allowed for return of appetite between the feedings.

Night Feeding. When hatched before April they should be fed by candlelight, late every night, or the long nights fasting will prove injurious. The colder the weather, the more necessity for the late feeding, to promote warmth, and however comfortably housed, without the warmth produced by frequent systematic and nutritious feeding, early broods can never thrive. They soon learn to run out and eat, the moment the candle light appears. Food should also be placed accessible to them at daybreak. The latter is especially necessary in the long days of summer, when they are up at dawn, and would suffer from hunger without this precaution.

Separating Broods. Where chickens are of different ages and without separate enclosures, the larger will domineer and rob the smaller ones, to prevent which, let a row of laths or stakes be driven across a corner of the yard, at such distances apart, that only the smallest chickens can pass between, then another row some two feet farther back and still farther apart to admit a second size but not the largest, which are to remain outside of all. Suitable foods for each class may then be placed in each division, where the chickens will quickly arrange themselves, and the attendant can favour the youngest with more expensive foods without their being robbed. Such an arrangement will also allow chickens to be fully fed, without the danger of over feeding the old fowls.

Green Food, as described for old fowls is also indispensable for chickens.

Animal Food. A very little twice a week where chickens have not a wide range is useful in promoting growth and early fledging. It should be cooked and minced fine and mixed with meal, or it spoils their relish for other food.

Water, fresh and clean, should be renewed twice a day; and kept in a fountain or shallow vessel, or the young chicks are very likely to be drowned in it.

The Foster Mother. Chickens which are weaned too early in cold weather may be transferred to another hen. Let another hen begin sitting upon an empty nest, and after she has sat a few days, place the chickens under her every night at dark. After this has been repeated for a week or so, her dislike to them will gradually be lessened, and they will go to her every night of their own accord, and after a few more days the sitting hen can be removed and cooped with the chickens, taking the same care of them as if she had hatched them. Also, in cases where a hen has hatched but few chicks, and there is an older brood likely to be weaned too soon, the latter can be transferred to her in the same manner, care being taken that they have a means of escape in the morning until the new mother becomes accustomed to them, lest she might kill them. We have repeatedly tried this plan with unvarying success.

Artificial Mothers for securing warmth at night to early weaned broods, may be made by suspending numerous hangings of wick from the under surface of a wide plank, fixed six inches from the floor. The wick hangings are made by cutting numerous pieces of wick about twelve inches long, and nailing the centre of each to the plank, leaving the two ends to hang down within half an inch of the ground. After placing the chickens under it for a few nights, they will learn to resort to it, where they will be kept warm and comfortable.

Liberty at Daylight. Very young chickens should be kept from the morning dew—and even older ones in bad weather. But in fine weather all chickens, after the first fortnight, will be greatly benefited by having their liberty AT DAYLIGHT, and for old fowls it is one of the golden rules of success.

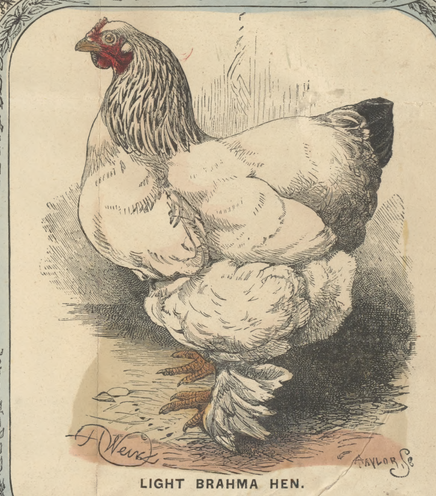
DISEASES.

Diseases of Poultry. How to PREVENT diseases should be the study of the Poultry keeper, and the above system of management should enable him to entirely prevent disease of any sort. Prevention is very simple; cure is very difficult and often impossible, and even when cured, hens rarely produce either good eggs or chickens. The best plan, unless the fowl is very valuable, is to kill it upon the first symptoms of disease while still suitable for food. A knowledge of the following CAUSES will assist in preventing disease; and also, indicate, to some extent, the remedy. OVER FEEDING produces crop-bound, laying soft-shelled eggs, egg-bound, dropping eggs from perch, or elsewhere, paralysis, &c. DEFICIENCY of WHOLESOME and want of green food and pure water causes gapes, pip, eruptions, white-comb, &c. EXPOSURE TO DRAUGHTS, DAMPNESS AND COLD causes roup, colds, bronchitis, cramp, diarrhœa, &c. Roup is highly contagious, difficult to cure, and often fatal. The symptoms are froth in the corners of the eyes, eyelids swollen, offensive discharge from the nostrils. The fowl should be killed whenever this disease appears or it may spread through the whole; and, so long as the disease is confined to the head and the appetite good the fowl is suitable for food. Bumble-foot—an enlargement with lameness—is caused by descent from high perches on to a hard floor, and is incurable



BUFF COCHIN COCK.

BUFFS *are the favourites among the 4 sorts of Cochins. The cock should have neck, back, and saddle hackles, and wing coverts, a deep, rich golden buff, the breast and lower parts corresponding with the hens.*



LIGHT BRAHMA HEN.

BRAHMAS (Light and Dark). *Very hardy—easily reared—splendid winter and summer layers—generally sit but once a year—excellent mothers—good table birds—require but limited space.*



LIGHT BRAHMA COCK.

THE LIGHT BRAHMA COCK *is similar in hackle and tail to the dark, but the rest of the body, i.e., the more exposed feathers, are white, any yellowness is considered very objectionable.*



BLACK SPANISH COCK.

SPANISH (Black and White).—*Excellent summer layers—non-sitters—rather delicate—chickens very delicate—inferior table birds. The plumage is brilliant black, with smooth lidlike white face and ears. There is a white variety similar in all but the color.*



BLACK COCHINS.

BLACK COCHINS *are of late coming more into favour, though in some respects they are not so perfect as the other three varieties. In colour, however, they are as perfect as could be desired.*



BLACK-BREASTED RED GAME.

GAME (Black-breasted and Brown-breasted Red, Duckwings and Piles, also Black, White, Duns, etc.)—*Noted for their great courage—unsurpassed for table—require a wide range—good layers—non-sitters. Black-breasted Red Cocks are of rich orange red on hackle and saddle—back and shoulders much darker.*



SILVER PENCILLED HAMBURGS.

HAMBURGS.—Golden and Silver Spangled; Pencilled and Black—*Moderate size—the most prolific layers known—excellent for table—require a wide range—rarely ever sit—not very hardy—should not be hatched too early. The Silver Spangled are of a silvery white ground color, the breast and wings of cock being spangled. Saddle and hackle-ticked at end of feathers with spangles.*

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